IDAHO
DEPARTMENT OF FISH AND GAME

Jerry M. Conley, Director

NAMPA HATCHERY

Annual Report

1 October 1983 - 30 September 1984

by
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Fish Hatchery Superintendent 11

June 1985

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NAMPA HATCHERY

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ABSTRACT

The Nampa Hatchery was scheduled to plant and transfer 200,000 pounds of rainbow and Kamloop trout into streams, lakes and reservoirs throughout Idaho. Our total production for the hatchery year came to 238,760 pounds of fish reared to be released to waters of Idaho.

We fed 385,660 pounds of feed with a conversion of 1.615 pounds of feed to produce a pound of fish. The total cost of fish feed came to $85,049.78; which comes to .356 cents per pound of fish. The total cost of fish excluding capital outlay came to .854 cents per pound.

Author:

Walter D. Rast
Fish Hatchery Superintendent II

OBJECTIVES

The objectives of the Nampa Hatchery are:

1. To raise 1,650,000 fingerling rainbow and Kamloop trout for different waters of the state.

2. To raise 750,000 catchable rainbow (200,000 pounds) to be transferred and planted in waters of the state.

INTRODUCTION

Nampa Hatchery is located in Treasure Valley, Southwestern Idaho, Canyon County, three miles south of Nampa. It receives water from eight artesian wells, 16 inches in diameter. Six of these wells are on hatchery property and two belong to the Nampa-Meridian irrigation district. The water flow varies from 31 to 36 cfs, and it appears the water table is directly related to water levels of Lake Lowell and irrigation seasons. I have been told by some of the old-timers that this water was not here on the surface prior to the construction of Lake Lowell.

The hatchery has 10 raceways, 360' long, 12' wide, 4' deep and divided into three sections; 3 raceways, 180' long, 12' wide, 3' deep and divided into 2 sections; and 16 raceways 50' long, 5' wide, 3' deep. The hatchery room has 5 fiberglass circular vats and upwelling incubators.

The hatchery should be able to produce 250,000 pounds of fish.

FISH PRODUCTION

Rainbow Trout

R1 rainbow is the primary strain reared at Nampa Hatchery. Production on hand at the start of the year was 495,917 fish weighing 44,463 pounds. The year ended with 261,922 fish weighing 44,463 pounds. The hatchery had on hand 254,646 eggs from Troutlodge. Fish released to waters of the state totaled 336,896 weighing 111,245 pounds. Transfers to other stations totaled 69,010 fish weighing 27,000 pounds.

R2 rainbow on hand at the start of the year totaled 164,131 fish weighing 3,549 pounds, and the year ended with 0 fish on hand. R2 releases totaled 96,950 fish weighing 24,325 pounds.

Kamloop K1 on hand at the start of the year totaled 157,048 fish weighing 17,901 pounds. The year ended with 0 fish on hand. K1 releases totaled 513,135 fish weighing 58,950 pounds; none were transferred to other stations. Eggs received from Troutlodge totaled 500,352.

FISH HEALTH

The fish health_this year appeared better than previous years. The construction projects were basically complete and this helped relieve some of the stress problems we had before. We never had a confirmed virus outbreak the whole fish year. Furunculosis was confirmed in the R2 rainbow. The first time they were treated with NF-180 for 15 days which was unsuccessful, and they were treated again with TM for 14 days and this was unsuccessful. It doesn't appear that the disease will be cleared up without destroying the fish and starting over. We had a 13% loss of these fish from Furunculosis. There have been no large losses in a single given time; the losses were just a constant occurrence that add up to a considerable amount each month. The hatchery lost 15,572 fish to Furunculosis, which came to 14% over an 8-month period.

Fry losses in the hatchery building are still a lot higher than we like. Part of it is definitely a density problem. Running 50,000 eggs per incubator and vat causes us to have to split the eggs up or move them out after a week of feeding. The only thing that has been confirmed is bacterial gill disease and a fungus start in the gills. They were treated with a salt bath and moved outside after a week on feed. We think the gill problems are caused in the round tanks because the food particles float on top when not eaten instead of flushing out.

FISH TRANSFERS

Table 1. Fish transfers from Nampa Hatchery to other stations.

Date	Species	Station	Number	Pounds	Release size
6-28-84	RB-R1	McCall	22,400	7,000	9.2"
6-18-84	RB-R1	McCall	10,800	4,000	9.7"
5-29-84	RB-R1	McCall	9,860	4,000	10.0"
5-31-84	RB-R1	Kamiah	7,500	3,000	10.0"
5-11-84	RB-R1	Kamiah	5,850	3,000	10.9"
4-27-84	RB-R1	Kamiah	6,300	3,000	10.6"
4-23-84	RB-R1	Kamiah	6,300	3,000	10.6"
		TOTAL	69,010	27,000	

FISH RELEASES

The following are totals planted in the different regions of the state from Nampa Hatchery:

Region 1

Kamloop K1	95,550 fish	9,100 pounds

Region 2

Rainbow R1	155,760 fish	41,800 pounds
Kamloop KI	79,380 fish	12,600 pounds

Region 3

Rainbow R1	266,096 fish	85,045 pounds
Rainbow R2	96,950 fish	24,325 pounds
Kamloop K1	214,695 fish	16,950 pounds

Region 6

Kamloop K1	123,510 fish	20,300 pounds
TOTAL PLANTED	1,031,941 fish	210,120 pounds
TOTAL TRANSFERRED	69,010 fish	27,000 pounds
Total Transferred and planted	1,100,951 fish	237,120 pounds

SPAWNTAKING OPERATIONS

There was not much involvement from the Nampa Crew at the Anderson Ranch kokanee trap this year. One man went over and helped set up trap. The run never really developed this year so there wasn't much time involved.

FISH FEED UTILIZED

The fish feed used by Nampa Hatchery came from a single contract source, Rangens, located in Buhl, Idaho. Table 2 lists sizes, pounds and cost of feed used,

MISCELLANEOUS ACTIVITIES

Visitors at the hatchery have been pretty low this year, apparently people do not realize the hatchery is open to visitors. The groups were also down a little from last year. We didn't have any senior citizen groups in. We did have four school classes and twelve Cub Scout groups.

New degassing boxes were designed, built and installed on all headrace inlets to the raceways for removing nitrogen and increasing oxygen. The D.O. entering all the raceways is 9 ppm now, and the nitrogen is 105 to 108.

A new degassing tower was designed, built and installed outside the hatchery building for the inside tanks and the one in the hatchery was removed, which decreased the noise level and moisture and improved the quality of the water.

Table 2. Fish feed used by Nampa Hatchery, October 1, 1983 through September 30, 1984.

Size	Pounds fed	Cost
Starter	250	63.34
#1	1,900	481.29
#2	6,900	1,872.73
#3	13,900	3,856.45
#4	22,250	4,943.90
#5	51,785	11,518.50
3/32	15,000	2,965.51
4/32	162,035	29,709.64
5/32	91,420	21,532.90
5/32 NF-180	5,870	3,292.99
1/8 TM	9,200	2,987.80
#1 TM	150	61.73
#5 TM	5,000	1,763.00
TOTAL	385,660	$85,049.78

The office building was completed and now has six office spots which includes a hatchery office and a secretary-reception area at the front desk. The shop was moved to the big cold storage room on the south end of the building. All of the cold storage units were removed, including walls, by two sportsmen groups: the "Gem State Fly Fishers" and "Nampa Bow Chiefs." They also sheetrocked, painted and repaired the floor for carpeting. The two clubs did this for the use of the conference room once a month for their regular business meetings. We were also able to get the conference room carpeted, so we have a very nice conference room available for use. It is being used more all the time.

ACKNOWLEDGEMENTS

Hatchery staffing during the year included:

Walter D. Rast, Fish Hatchery Superintendent II; Steve Dillon, Fish Hatchery Superintendent I; Robert Owens, Fish Culturist; Gary Ady, Biological Aide and Fish Culturist; Ted Choules, Biological Aide; Melvin Prince, Fish Transport Operator; Kenneth Taylor, Fish Transport Operator; Brian Gessford, Laborer; Tim Hubler, Laborer; Arnold Aston, Biological Aide; Rick Sanchez, Biological Aide; Kevin Dinius, donated time for school credit and Bill Shannon, donated work for experience.